

REMARKSOverview

In the March 16, 2007 Office Action, the Examiner rejected claims 1-6 and allowed claims 7-15. The Examiner also objected to minor informalities in the specification and claim 1. Claims 1-3 were rejected as being unpatentably obvious over Berrenberg (US 582,256), Herbsman et al. (US 1,909,955), or Parks (US 1,774,662) in view of Nissels (US 4,773,305). Claims 4 and 5 were rejected as being unpatentably obvious over Berrenberg, Herbsman et al., or Parks in view of Nissels, as applied to claim 1, and further in view of Strohmeier (US 4,883,409). Claims 4 and 6 were rejected as being unpatentably obvious over Berrenberg, Herbsman et al., or Parks in view of Nissels, as applied to claim 1, and further in view of Stempel (US 2,675,946). Although claims 1-6 were rejected, Applicant very much appreciates the Examiner's allowance of claims 7-15.

Specification

At the request of the Examiner, the specification has been amended at page 7, line 14 to replace the words "Tube tubular" with the word "Tubular" in order to alleviate any redundancy. This is believed to be the only occurrence of this particular informality.

Claims 1-3

Claims 1-3 were rejected as being unpatentably obvious over Berrenberg (US 582,256), Herbsman et al. (US 1,909,955), or Parks (US 1,774,662) in view of Nissels (US 4,773,305). The Examiner states that each of the references, Berrenberg, Herbsman et al., and Parks, disclose a pump having a first and second piston and cylinders and first and second valve assemblies, wherein the pistons move in opposite directions and the pump drive is coupled to the first and second pistons and to the first and second valve assemblies. However, none of the references

cited above disclose a three-way valve assembly having a common fluid entry and exit port, which is fluidly connected to the lower end of the cylinder.

Thus, independent claim 1 has been amended to claim a first three-way valve assembly having a first inlet port (64A), a first common port (61A) and a first outlet port (66A), wherein the first common port (61A) is fluidly coupled to the first cylinder lower end. Claim 1 is further amended to require that fluid entry to and exit from the cylinder occurs through the first common port (61A) of the first three-way valve assembly (60A). The second valve assembly (60B) of claim 1 has also been similarly amended. Claim 1 has also been amended to correct minor informalities cited by the Examiner, i.e. on page 15, line 5, the word “piston” has been changed to “pistons” and on page 15, line 11, the word “clears” has been changed to “closes.”

Because the cited prior art references do not teach or suggest the amended limitations, independent claim 1 is patentably distinct over Berrenberg, Herbsman et al., or Parks, in view of Nissels. Furthermore, claims 2 and 3, which depend from independent claim 1, are also patentably distinct.

Claims 4 and 5

Claims 4 and 5 were rejected as being unpatentably obvious over Berrenberg, Herbsman et al., or Parks in view of Nissels, as applied to claim 1, and further in view of Strohmeier (US 4,883,409). However, claims 4 and 5 depend from independent claim 1, which has been amended to be patentably distinct from the cited prior art references. Therefore, claims 4 and 5 are also patentably distinct.

Claims 4 and 6

Claims 4 and 6 were rejected as being unpatentably obvious over Berrenberg, Herbsman et al., or Parks in view of Nissels, as applied to claim 1, and further in view of Stempel (US

2,675,946). However, claims 4 and 5 depend from independent claim 1, which has been amended to be patentably distinct from the cited prior art references. Therefore, claims 4 and 6 are also patentably distinct.

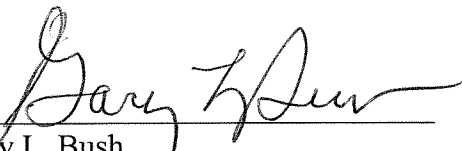
Claims 7 and 9

Claim 7, previously allowed by the examiner, has been amended to remove two extraneous occurrences of the word "and" from the claim. Similarly, claim 9, previously allowed by the examiner, has been amended to add the word "and" where needed.

Summary

In view of these remarks and claim amendments, applicant respectfully requests the allowance of claims 1 through 6 as amended, claims 7 through 15 as previously allowed, and passage of this application to issue.

Respectfully submitted,

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